Elements of Artificial Neural Networks. By Kishan Mehrotra, Chilukuri K. Mohan and Sanjay Ranka. MIT Press, Cambridge, MA. (1997). 344 pages. $55.00.

Contents:

Preface. 1. Introduction. 2. Supervised learning: Single-layer networks. 3. Supervised learning: Multilayer networks I. 4. Supervised learning: Multilayer networks II. 5. Unsupervised learning. 6. Associative models. 7. Optimization methods. A. A little math. B. Data. Bibliography. Index.

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Confessions of a happy hacker (Guy Steele). Hacker in a strange land (Eric Raymond). Preface to the second edition. Preface to the third edition. Introduction. How jargon works. How to use the lexicon. The jargon lexicon. Appendices. A. Hacker folklore. B. A portrait of J. Random Hacker. C. Helping hacker culture grow. Bibliography. Contributors.

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Data Structures and Algorithms: A First Course. By I. Adamson. Springer-Verlag, London. (1996). 419 pages. DM 38.00, öS 277.40, sFr 34.00.

Preface. I. Data structures. 1. Arrays, records, and linked lists. 2. Stacks and queues. 3. Binary trees. 4. Heaps. 5. Graphs. II. Algorithms. 6. Algorithms and complexity. 7. Sorting algorithms. 8. Graph algorithms. 9. Some miscellaneous algorithms. III. Storing and searching. 10. Storing in arrays and lists. 11. Storing in binary trees. 12. Storing in multiway trees. IV. Solutions. 13–24. Solutions to exercises 1–12. Index.

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Contents:

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1. Change. 2. Position. 3. Linear algebra. 4. Combinatorics. 5. Graphs and algorithms. 6. Analysis of algorithms. 7. Logic and the design of "intelligent" devices. 8. Chance. 9. Modern algebra. Appendices. 1. A brief excursion into set theory. 2. Pseudocode. Solutions to odd-numbered exercises. Recommended readings. Index.

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Contributors. Preface. Part I. Foundations. 1. How different is partial logic? (Tore Langholm). 2. Sequent formalizations of three-valued logic (Douglas Busch). 3. Modalities for reasoning about knowledge and uncertainties (Wiebe van der Hoek and John-Jules Meyer). 4. Fundamentals of partial modal logic (Jan Jaspars and Elias Thijsse). Part II. Case studies. 5. A study in modal embeddings of NML3 (Patrick Doherty and Witold Lukaszewicz). 6. A model-based approach to predictive causal reasoning (John Bell). 7. Partial semantics for truth maintenance (Cees Witteveen). 8. Combining partial and classical semantics. A Hybrid approach to belief and awareness (Elias Thijsse). 9. Autoepistemic logic as a basis for automating nonmonotonic reasoning (Ilkka Niemelä). Name index. Subject index.